The Scholar

MAY 1938

407

1655

CONTENTS

		Page
1.	Tactica Adversa *By Nicholas Roerich*	411
2.	Nutritive Value of Rice Varieties *By Dr. A. Sreenivasan, M. A.. D. Sc., A. I. C.*	415
3.	Paranirvana (Poem) *By Barnett D. Conlan*	420
4.	Treatment of Molasses for Agricultural Purposes with Special Reference to India. *By S. C. Pillai, B. A.*	421
5.	The Wardha Scheme of Education	428
6.	Tales from Indian History *By V. Rangacharya, M. A.*	437
7.	The Boy Who Went to Moy Elga (Poem) *By F. H. Aldhouse*	444
8.	Current Comments *By An Observer*	445
9.	Book Reviews	453

E. H. PARAMESWARAN, M.A., L.T, *Editor.*

E. N. SUBRAHMANYAM, M.A., B.L.,
E. V. RAMAKRISHNAN, B. A.
} *Associate Editors.*

FOR BEGINNERS IN ENGLISH

ACTIVE ENGLISH READING SHEETS

The ONLY set of its kind
specially prepared for ORAL Teaching
of English to Indian boys

INVALUABLE FOR ALL HIGH AND MIDDLE SCHOOLS

29 Reading Sheets, each measuring 20 x 30 inches, printed in bold print-script on stout drawing paper.

Each sheet is supplied with an ILLUSTRATION to suit the reading matter.

Price, Rs. 5 only per bound set of 29 Reading Sheets and 28 Illustrations. V. P. P. charges, Re. 1-8.

A School Without MARTIN'S READING SHEETS is like the School without wall-maps.

STOCKISTS IN MADRAS.

Headmasters and Booksellers in the Madras Presidency are informed that we have appointed Messrs. Christian Literature Society for India, Park Town, Madras, as *Sole Stockists* of all our publications in the Madras Presidency.

All orders for our publications should, therefore, be addressed direct to them.

COOPER—PUBLISHERS—BOMBAY.

1938

SILVER JUBILEE

VALUATION

HIGHEST BONUS

IN INDIA

Rs 75 TRIENNIAL	LAST VALUATION	Rs 60 TRIENNIAL

Special Agency Terms Now Offered

THE WESTERN INDIA

Life Insurance Co., Ltd., Satara.

Chief Agency for South India:

13, THAMBU CHETTY STREET, MADRAS

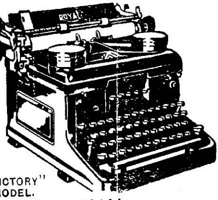
ROYAL

"VICTORY" MODEL TYPEWRITER.

WITH TOUCH CONTROL . . the greatest advance in Typewriter design . . . for many years.

EXCLUSIVE FEATURES.

1. TOUCH CONTROL.
2. SHIFT FREEDOM.
3. MUTED ACTION.
4. MINIMIZED EYE STRAIN.
5. FINGER COMFORT KEYS.
6. INCREASED DUST PROTECTION.
7. ACCELERATING TYPEBAR ACTION.
8. CARRIAGE RAIL CHROMIUM STEEL INSERTS.



"VICTORY" MODEL.

Altogether seventeen new and exclusive features have been incorporated in this new Royal — to minimize effort, to save time, to reduce service costs to a minimum — and above all to produce neater and more accurate letters — yet the price remains unchanged.

THE EASY-WRITING ROYAL IS FASTER, EASIER, MORE ACCURATE AND IT LASTS LONGER . . . COMPARE THE WORK!

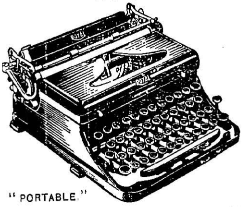
"WINNER OF ALL THE GREAT SPEED RECORDS."

LATEST "DE LUXE" PORTABLE.

The ideal machine for home or office use. It has all the features and convenience of a large size office typewriter, including tabulators.

Sales and Service in the principal towns.

Let our Representative call and demonstrate one of these wonderful machines.



"PORTABLE."

Sole Agents:

ADDISON & CO., LTD.

MOUNT ROAD, MADRAS.

Branches at BANGALORE, COIMBATORE, BEZWADA, TRICHINOPOLY & VIZAGAPATAM.

Local Branch : Main Road, TRIVANDRUM.

SCIENTIFIC APPARATUS

First Quality Goods of every make and description Stocked.

All Apparatus from the Original Manufacturers and at Competitive Prices Supplied.

Efficient Service and Entire Satisfaction Guaranteed.

THE CENTRAL SCIENTIFIC SUPPLIES CO., LTD.,

14, Perianna Maistry Street,

G. T., Madras.

THE SITARAM

ANGLO-AYURVEDIC PHARMACY LTD.,

CHEMISTS & DRUGGISTS, TRICHUR (Estd. 1921.)

The Premier Ayurvedic Pharmacy in the Malabar Coast Manufacturing Genuine Ayurvedic preparations on Sastraic principles Under Expert Supervision.

Suppliers to Taluk Board & Municipal Dispensaries.

A depot of the Pharmacy has been opened at

The Sitaram Stores, Gandhi Bazaar Road, Palghat

opposite to the Railway Goods Shed.

Free consultation with our expert Physician can be had during business hours at the above Depot and all correspondence will be kept strictly confidential

We earnestly request the public to give us a fair trial and extend their kind patronage.

N. B.—We always hold a good stock of pure Saffron, Musk, Camphor etc., for sale at reasonable rate.

A NEW SERIES OF ENGLISH READERS

THE CORONATION ENGLISH READERS

EDITED BY

Prof. J. C. ROLLO, M.A., J.P.,

Principal, Maharaja's College, Mysore.

Primer, Part I	(III Class)	**As. 3**
Primer, Part II	(IV Class)	**As. 3**
Primer, Parts I & II	(Single Volume)	**As. 6**
Book I	(V Class)	**As. 6**
Book II	(VI Class)	**As. 8**
Book III	(VII Class)	**As. 10**
Book IV	(VIII Class)	**As. 12**

This new series of English Readers provides, in addition to suitable reading matter, systematic practice in the use of language. The language has throughout been carefully graded in point of vocabulary and grammatical structure so as to lend itself readily to treatment in class, while as regards choice of topic and method of presentation the age and general outlook of the pupil have always been borne in mind. The lessons have been so devised as to interest the pupils in matters that are really important for them. The Readers aim at giving accurate knowledge of the English Language as written and spoken and stimulating interest in the world around. The books are well illustrated.

Applications from the Heads of institutions for specimen copies will be complied with.

B. G. PAUL & CO.,

EDUCATIONAL PUBLISHERS,

12, Francis Joseph Street, G. T., MADRAS

MARGO
CONTAINS NEEM OIL
TOILET & MEDICINAL
Cleansed
and protected
Bathe with Margo Soap and see how clean and refreshed you feel. Its creamy, antiseptic lather cleanses each tiny pore of every trace of dirt and dust and leaves the skin cleaner and refreshed. Made as it is from refined Margosa Oil, Margo Soap removes perspiration odour, and protects you from prickly heat and other diseases.
MARGO
SOAP
The ideal soap for all toilet purposes

Telegrams: "SIGACO" Phone: 3168

THE

SOUTH INDIAN

GENERAL ASSURANCE Co., LTD.,

(*Incorporated in India.*)

Head Office :—

Christian College Building, Esplanade, MADRAS

Branches :—

BOMBAY

381, Ismail Building,

Hornby Road.

CALCUTTA

9, Dalhousie Square,

East.

District Organiser's Office :—

BANGALORE

24, A Balepet.

A first Class Indian Life Office Offering

MAXIMUM BENEFITS at MINIMUM COSTS

DOUBLE & TRIPLE BENEFIT POLICIES A SPECIALITY

Influential and reliable persons are offered the best

opportunity as agents and Organisers.

FEMALE LIVES ACCEPTED

Intending agents are invited to correspond with

Messrs. K. C. Pandalai & Co.,

MANAGING AGENTS

THE SCHOLAR

Vol. XIII. | MAY 1938 | No. 8

Tactica Adversa

(Diary Leaves)

BY NICHOLAS ROERICH

CHENGHIZ-KHAN frequently resorted to feigned retreat in order to draw the enemy into pursuit, and thus the more easily to smite him in the rear with his reserve forces. Thus is it told. It is likewise said that the tireless conqueror sometimes set fire to the steppe behind his hordes in order thus to speed the movement of his army. Perhaps such tales of the versatile military technique of the great conqueror are true, but in any case they are plausible, because in his great campaigns Chenghiz-Khan undoubtedly made use of the most diverse technique unforeseen by his enemies.

It is also attributed to him, that, wishing to maintain a healthfully austere way of life, he ordered his high officials to tear their expensive silken garments on thorn bushes in order to demonstrate the inapplicability of such clothing. It is said that he simulated indisposition from imported beverages in order to attract people to the local milk products.

In ancient history can be found many examples of the most unexpected counter tactics which produced most conclusive results.

In battle man cannot discriminate precisely when he is exposed to the utmost danger. During the impact itself it was impossible to examine which circumstance was most perilous or most beneficial. What blow saved one from

12 6 636.
600 008

a still greater blow? A falling horse by its fall protected one from an unexpected overthrow. A casual outcry caused one to turn around and thus avoid a deadly arrow. Therefore right was ancient wisdom which paid attention to the final result, to the effect of all that takes place.

It is impossible to fix the end premeditatedly, but from the end it is possible to see from what was composed much that has preceded. For these observations well-tested attentiveness is needed, but likewise requisite is knowledge of what counter tactics consist of. This latter circumstance, so salutarily effective in many historical events, is not often examined. True, people like to repeat; "No luck, but misfortune helped",—yet in this speech there is assumed as it were an accidentalness of some sort of misfortune; but of course counter tactics do not know bad luck. They know only systematic actions which it is difficult to calculate in close proximity to them.

Each traveller knows how clearly and beautifully is outlined a snow-covered peak at a distance, and how much it loses form during the severe and hazardous approaches to it. Likewise in events it is difficult to make a proper estimate in inordinate proximity to them. But counter tactics say reassuringly, that where there is a pure fiery striving, there also all accompanying manifestations are shown to be systematic. But much refined consciousness must be applied in order to evaluate the unusual actions of counter tactics. True invincibility will always be concomitant with extreme resourcefulness. People cannot recognize the upward leading paths and, for their part, must apply all sensitiveness of resourcefulness and mobiliy.

Each worker knows the value of mobility. How far must this true mobility be from the petty fidgeting which can only complicate proper movement. When a worker is asked how he walks, he will reply that he does not know precisely how, but whither he knows steadfastly from the hour of setting out. In the same way no sort of "unexpectednesses" of the path confuse the true doer of things. He has already assumed the premise that in everything which happens will be the element of utility.

He likewise knows that certain encountered actions must be brought to the opposite extreme, because only then is their meaning manifested and in the same way panaceas found. Each senseless attack thus acquires greater evidence of absurdity if it is helped to roll along to the limit. Then is unrolled the whole abominable absurdity and even a casual observer will apprehend the degree of hideousness.

So many times an experienced leader, having an opportunity to cut short a stream of absurdity, has held back his followers, saying: "Let it roll on." The wise leader calls up his hidden troops only after necessary measures have been carried out. What sort of a leader would he be if he summoned his secret reserves prematurely? The enemy would not yet be fully disclosed. The hostile forces still would not have attained their utmost intensity, yet his reserve troops would be fully engaged. Therefore counter tactics know, first of all, such practice of economy.

But the inexperienced watcher cries out; "Stop! Why? this is senseless!" But the experienced worker corrects him: "It is not only foolish but also ugly. Wait a minute and you yourself will see this intolerable degree of ugliness and ignorance devour itself."

The history of various peoples does not by accident continually repeat to us about different manifestations of counter tactics. These repetitions allow us to memorize examples of the victorious expedient of the counter blow. You know how people say: "Give a thief rope and he'll hang himself", or "Dont wave, he's coming." Yet the same popular wisdom proposes that the rope must be given, yet the awaiting of the coming also goes on not in carelessness but on the contrary in full attentiveness and tensity.

So many times the best covenants speak about smiting darkness. This means the overthrow of darkness must come to pass and therefore counter tactics must be only a means of conflict but in no wise a permissible inaction. When people say: "Give a thief rope and he'll

hang himself ", in this is foreseen a whole series of actions. The thief must be discovered. The rope must be at hand, there must be enough of it and it must be given. While the thief must carry out an action, for he must hang himself with this rope.

History does not relate how Judas found his rope. It is thought that he found it in some special way, because his unheard-of evil-doing led him to self-destruction. Only observe, and you will see how evil-doing defeats itself. I have already had occasion to write about many observed cases of diverse forms of overthrow of villainy. Actually in this multiformity of automatic retribution is contained the singular refinement of the laws.

Here we speak about justice, yet you know that around this concept cling the countertactics, and by their often inexpressible reactions they help in the discovery of every step of evil. For a structure a clean place is needed. Each builder is first of all concerned about the ground on which the foundation is to stand. He sees if there are any fissures or dangerous crevices. By all the best measures he avoids corroding moisture, and first of all he fills up any cracks.

After the erection of a structure, no one pictures to himself what deep underground labors have taken place for the solidity of walls and towers! Before beginning his upper structures, the builder directs his attention to all the deep-seated unexpectednesses. If moisture should appear he will not suddenly abandon the sandy ground but will carefully observe what are the ultimate quantities of the moisture and where its source. We know how sometimes even urgent structures have been delayed while unexpected underground conditions were put in order.

" Blessed are the obstacles, by them do we grow." He who said this knew all the dimensions of the obstacles, and by his experience could appraise them and apply them beneficially. Construction in goodness is tireless, prudent, attentive. What beauty is contained in this inexhaustible creation !

Nutritive Value of Rice Varieties

By Dr. A. SREENIVASAN, M.A., D.Sc., A.I.C.

IT might be supposed that the estimation in which any variety of rice is held among the consumers, as evidenced by its market price, would be mainly determined by its value as a foodstuff. Unfortunately, however, such is not the case. The consumer's preference is only based on appearance and palatability which includes culinary qualities such as swelling and consistency on cooking, flavour, taste and such other factors. It is not often that this choice is also the best from the nutritional point of view. With the march of progress from primitive to modern conditions, there has been an increasing demand for a rice that is white, not merely on account of its more attractive appearance on the table, but also because of its finer texture and superior keeping and cooking qualities. In pursuit of this objective, the processes of modern milling have been so elaborated as to remove everything that may impart a brown tinge to the rice grain and so detract from its appearance; as a consequence, the older methods of stone-grinding and hand-pounding have gone entirely out of use even among the most primitive communities.

Consumer's preference for polished rice: To look back along the centuries at the changes in cereal production is to see the gradually gained ascendancy of milled over unmilled products. Peasant farmers began to forsake traditional methods of reaping, threshing and grinding grain and adopted the new mechanical appliances which were being introduced with astonishing rapidity. The general current of recent industrial progress and production of cheap foodgrains by improved methods of agriculture have resulted in unlimited supply, low cost, abandonment of primitive customs and urbanisation ; of populations these factors have, in turn, contributed in no small measure to the increasing consumption of milled cereals during the last hundred years. The last Nutrition Conference held at Delhi

realised the necessity for detailed investigations regarding relative costs of milled and home-pounded rice and the reason for the gradual replacement of the latter by highly polished rice.

Superior value of unpolished rice: In considering the nutritive value of rice, the feature of outstanding importance is the high concentration of essential constituents found both in the outer coat and in the germ or embryo. The outer envelope or bran and the germ portion together constitute nearly one-sixth of the whole grain, the remainder being the endosperm. This is a circumstance of considerable practical importance inasmuch as it is just these portions which are removed in the process of milling. In the production of polished rice, therefore, more than half the mineral matter of the grain and a fourth of the protein constituents are lost, while the fats and the vitamins are almost entirely removed. Is any more argument needed in favour of the use of whole unpolished rice ?

Shelled unpolished rice does not, however, keep for long periods, becoming rapidly rancid and getting readily attacked by insects. This difficulty can be overcome by shelling the required quantity from time to time in small wooden hand-hullers or in hand - or power-driven hullers which are also available. Hulled rice can also be kept unspoilt for prolonged periods by suitable methods of storage.

Digestibility of unpolished rice: On account of the thick-bran layers, unpolished rice is rather slow to cook, but this defect is more than compensated by the bigger return of shelled rice. The present system of milling yields only half to two-thirds by volume of head rice, whereas if only hulling is resorted to, the yield may be over three-fourths. In this manner, the consumer will stand to gain not only in the quality, but also in the quantity of available food material.

There is a general impression that uupolishnd rice is very difficult to digest. There is no doubt that some of the bran constituents exercise an inhibitory action on the

digestive ferments, but the difference in digestibility between unpolished and polished specimens is so small as to be insignificant in practice. Unpolished rice is richer than polished rice and must, therefore, be taken in smaller quantities.

Ill effects of unstored 'new' rice: It has been largely borne out by experience that freshly harvested rice cooks to a pasty condition and produces certain digestive disorders. The most important change attendant on storage is the increased capacity for swelling on cooking. The cooked grains also remain detached from each other. The properly swollen grains are better penetrated by the digestive secretions than those which are not. They also present a larger reactive surface so that the digestion proceeds rapidly. Furthermore, stored rice after cooking has more filling power because of its greater volume and thus gives a sense of satisfactien more readily than that from unstored rice. The latter is generally consumed in larger quantities so as to obtain the necessary satisfaction and being also slow to hydrolyse, causes digestive disorders.

Coarse Vs. fine rice: In spite of the bewildering number of rice varieties, it is rather remarkable that the average values for the different constituents, such as proteins, fats, carbohydrates and mineral matter, in rice fall within a close range. However, it has been observed by the writer that the coloured and coarser rices contain larger amounts of protein and mineral matter, particularly phosphorus, calcium and iron. Also, with such varieties, polishing has to be done to a greater degree than with the fine varieties, before a white product results. They thus contain thicker bran layers than the others. The coarse types of rice do not usually possess good milling qualities. Hence it would follow that, under ordinary conditions of milling, the extent of loss of essential constituents from coloured or coarse varieties will be less than with the so-called superior varieties.

From results of extensive feeding experiments with animals, it has been shown by the author that the growth-promoting qualities of different varieties of rice are essen-

tially related to their protein and mineral contents. There is no doubt that, other things being equal, the variety of rice which contains larger amounts of albuminoids and minerals such as phosphorus, calcium and iron is more valuable. It is, therefore, highly desirable to educate the public in regard to the superior nutritive value of unpolished and coloured rices. The present popular favour for white polished rice is comparable with that of white bread a few decades ago. By suitable health propaganda, it should be possible to change the outlook of the people and in fact, even create a fashion for unpolished and coarse rices as we now have for the various brands of brown bread. It is indeed, gratifying to note that the Madras Government is taking steps for effecting substitution of polished rice by hand-pounded rice in hospital dietaries.

Rice bran as an article of food: Rice bran is the most nutritious part of the rice grain, since it contains fats, proteins and vitamins. The fats in rice bran are about the same as those in peanuts and are considered quite nutritious. The proteins are very similar to meat proteins. Rice bran contains vitamin B1, which prevents beri-beri and vitamin A, which prevents eye afflictions and general ill-health. It has also the anti-sterility vitamin E It has other excellent food constituents with a high calorific value.

At present rice bran is very cheap and is used for feeding cattle and poultry. Millers often dilute the bran with rice hulls in order to dispose of the hulls with profit. Bran admixed with hulls is not suitable for use as an edible product because the latter has an irritating effect when taken internally.

Bran flours are considered quite nutritious and are very popular in the United States and elsewhere. This would naturally suggest the use of rice polishings for human consumption, especially since it is very much cheaper than the flour. The reason that rice bran has not become a popular human food is that it contains a quantity of vegetable fatty oil. When rice bran is stored,

the oil becomes rancid and the bran acquires a disagreeable taste. The most convenient method for preserving rice polish is to heat it when fresh at a temperature of about 100° for a few hours and then keep in moisture-proof packages. Heating removes some moisture, stops the destructive action of the enzymes, destroys any mold spores, insects or insect eggs which may be contained in the bran, but does not affect the vitamins. Bran treated in this manner is slightly darker in colour than the fresh, raw bran, but it has a pleasanter odour and flavour.

The natural flavour of rice bran may be considerably toned down by diluting with wheat flour. A mixture consisting of three parts of wheat flour and one part of rice bran makes a good combination for bakery products, such as bread, cakes and biscuits. Indeed, large quantities of bran are exported from India for this purpose. Rice bran does not contain gluten and so, when used alone, it does not make bread that will rise. The addition of wheat flour not only weakens the flavour of the bran but also supplies the gluten necessary for making bread.

Commercial rice bran may contain some fragments of rice kernels and rice hulls. If the bran is to be used for making bakery products or other foods, it is necessary to sieve and remove the hard and coarse particles.

For the poorer classes who live on a diet composed principally of polished rice and is more or less deficient in fats, proteins and vitamins, the use of rice bran as a food would serve to supply, to a considerable extent, the present dietary deficiency and thus improve their general health and well-being.

Paranirvana

It is more then we can say
Or we can know,
Where is this region,
If it once appear,
The day fades into ashes
Ample glow as of moon and stars
Kindles our sphere;
Solitary, perpetual,
Rarely known,
By all the ordered race of men beneath,
Must be this world to which we go,
Mysteriously beautiful,
A gate,
To the Everliving,
Fringed with peacock wings
From the glory of Night,
And the inconsumable Soul of things.

Barnett D. Conlan.

Treatment of Molasses for Agricultural Purposes with Special Reference to India

By S. C. PILLAI, B. A.

(*Department of Biochemistry, Indian Institute of Science, Bangalore.*)

METHODS of utilisation of waste products form at the present day, in all industries, a subject of the highest importance. By finding an economic way of utilising the by-products it is often possible to dispose of the main product at a lower price, or when prices are lowered more and more by competition, a profit may even be made from the by-products.

With the constant advance in the production of white sugar it naturally follows that the amount of molasses, the chief by-product of the industry, has also undergone an increase. The amount of this waste product is often so enormous as to occasion serious inconvenience to the producers. Neither storage room nor any cheap means of transport is available, and the product becomes a regular source of trouble and sometimes a source of danger too.

The molasses situation in India is so well known as scarcely to require mention. The subsidising of sugar and molasses derived from home-grown sugarcane during the last six years of its existence has caused considerable economic repercussions affecting sugar refiners. Although the benefits accrued from the development of this industry in our country have been undeniably great, its further progress largely depends on the solution of the problem of molasses. The annual output of this material has been rapidly increasing, and at the present time it is estimated that over half a million tons of molasses has to be annually dealt with. In fact, when the Tariff Board reported on the Indian Sugar Industry in 1931, they had taken into consideration the price of molasses as a rupee and a half per maund which the sugar factory people would get for

all their molasses ; whereas today not only do they find it difficult to realise any price for their large stocks of molasses but are confronted with the problem of even keeping it conveniently.

Having found it practically not possible to recover, at any rate, even a very small percentage of the large quantity of sucrose that is remarkably locked up in the molasses, various other methods of utilisation of this by-product have been suggested in recent years. The more important suggestions have been the manufacture of power alcohol, use as fertiliser, manufacture of yeast, manufacture of caramel, use as fuel, utilisation in a number of fermentation industries such as those of lactic or citric acid, acetone and butyl alcohol or glycerine, and also in other industries like the plastic industry. But in practice, most of these suggestions have been found to be impracticable. Nevertheless, the two methods of utilisation which will assume very large dimensions in the future and which are perhaps even destined to produce a scarcity of molasses are (1) conversion of this substance into power alcohol and (2) the utilisation in the production of a concentrated complete fertiliser by mixing it with other by-products or waste materials and then adopting a suitable preliminary treatment prior to its application to soil. Incidentally, the latter procedure would provide a simple method of returning to the land a considerable part of the fertilising ingredients originally removed by the crop.

The manufacture of alcohol will undoubtedly be a satisfactory method of disposing of molasses because of the fact that it can be used for internal combustion engines, although there are some defects associated with the incomplete combustion of alcohol and some problems connected with the transport and distribution of the alcoholic petrol. But the Government of India, having regard to the loss of a certain amount of the vast revenues by the adoption of a legislation to the effect of manufacture of alcohol and its usage in combination with petrol, do not seem to take up this question in spite of the fact that the Indian Sugar Mills Association and, more recently, some of the provincial

governments themselves have been urging them to do the needful in the matter.

Under the circumstances, and particularly in view of the agricultural conditions in India, a consideration of the fertilising value of molasses will be very useful. In a country like India where agriculture is the mode of life of a large part of the population and where the causes of its difficulties are economic in character rather than due to any failure to apply present-day scientific knowledge to the technique of farming, molasses also finds its useful application in the development of plant industry. It is of course a well recognised fact that India's material advancement and all its industrial development are entirely dependent on improved agriculture and on the rate at which the means of subsistence could be raised from Indian soil.

The serious deficiencies of Indian soils and the various aspects of the manurial problems in the different tracts of this extensive land have been made fairly clear in recent years as the result of the useful enquiries of the agricultural departments of the various provincial governments and also of those made by the several commissions and experts appointed, from time to time, by the Central Government. It has been observed, however, that the deficiencies of nitrogen, organic matter and phosphoric acid are the more important factors that have been limiting crop production; and it has been repeatedly pointed out that all these fertilising ingredients have to be supplied to the soil in the cheapest way possible by reason of the very limited purchasing power of the Indian farmer. This state of affairs in constituting perhaps the distinctive feature of Indian agriculture would indeed suggest that the available waste materials may be better utilised in solving some of the manurial problems in the country. It is therefore considered that waste products like molasses could be treated and converted into plant food for making up the deficiencies of the soil.

A study of the composition of molasses (about 40 per cent cane sugar ; about 30 per cent invert sugar as glucose; 15-20 per cent moisture ; 2-4·5 per cent potash, K_{20} ; and

the rest being other minerals and also a small percentage of nitrogen, under 1 per cent.) would show that it has all the potential qualities of a good fertiliser. It contains a considerable part of the soluble minerals removed by the cane or beet (as the case may be) from the soil. But the main feature of this waste product is the presence of a high percentage of readily fermentable sugar, the practical significance of which has been increasingly recognised in recent years. The organic acids produced in the soil on application of molasses, not only increase the availability of plant nutrients already present in the soil but facilitate fixation of atmospheric nitrogen, as has been shown by a number of workers both in India and abroad. More recently, the work of Bhaskaran and Subrahmanyan (1936)* has shown that this fertilising action of the sugars, from the point of view of biological fixation of nitrogen, could be considerably increased. If, however, molasses is subjected to a preliminary fermentation outside the field before application to land, the efficiency in regard to fixation of nitrogen in soil could be increased by about three times. It has been found that the carbon of the mixed calcium salts of the organic acids produced during fermentation of molasses by the mixed flora of soil are used thrice as efficiently as the original molasses carbon. This observation, that molasses may be used as an economic source of energy material for the nitrogen fixing bacteria in the soil and thus the natural process of biological fixation of nitrogen can be facilitated, is of supreme importance to general agricultural practice and particularly to the practice of agriculture in India, both from the economic as well as the efficiency point of view. Further the nitrogen (in organic combination) thus made available for plant nutrition is, by far, better than the artificial nitrogenous fertilisers.

Further researches on the fertiliser aspect of molasses carried out in this laboratory have shown that a useful amount of fully available phosphorus can also be effectively incorporated into it, and that too on an economic basis ; so

* Bhaskaran, Proc. Ind. Acad. Sci., 1936 *3B*, 320.

that the resulting product would be much more useful both as a potentially nitrogenous as well as a phosphatic manure. The principle of this process consists in the utilisation of large quantities of organic acids (chiefly lactic, acetic, butyric and propionic) produced during fermentation of molasses in the dissolution of bone and rock phosphates which are abundantly available in the different parts of the country. Such an actively fermenting medium would naturally render the insoluble phosphates present in those raw materials a more readily available phosphatic fertiliser. In fact, one of the most important lines of fertiliser industry is concerned with the conversion of bone and rock phosphates into soluble products; and the best known sulphuric acid method for the purpose cannot be widely adopted in India owing to the absence of natural resources in the country for the production of cheap sulphuric acid, and also owing to other economic considerations. Again, most of the other inexpensive methods proposed during the past few years in India and elsewhere (Lipman and McLean 1916; Waksman and Joffe, 1922; Joffe, 1922, 1923; Hutchinson, 1924; Ramaswami Iyer and Perumal, 1928; Vyas, 1930)* have not been found to be practically applicable. But the utilisation of molasses for the purpose, in the manner as indicated above, would be not only a more useful way of disposing of that waste product but also a cheap and efficient method of preparing a fully available (1 per cent citric soluble) phosphatic fertiliser. Further, this procedure derives its added importance from the fact that a type of mixed fertiliser will be produced ultimately. For, it will contain useful quantities of available phosphorus, potassium, calcium and also the associated organic matter; and, what is more important, it can fix a considerable amount of atmospheric nitrogen.

Although molasses contains useful fertilising elements, and has inherent qualities as an important fertiliser, an extensive utilisation of it has not been possible. This is

* Lipman and Mclean, *Soil. Sci.* 1916, *1*, 533; Waksman and Joffe, *J. Soil. Chem.*, 1922, *50*, 35; Joffe, *Soil Sci.*, 1922, *14*, 479; *Ibid.*, 1923, *15*, 41, 93; Hutchinson, *Agric. Jour. India*, 1924, *19*, 4; Ramaswami Iyer and Perumal, *Jour. Ind. Inst. Sci.*, 1928, *11A*, 85; Vyas, *Agricultural Research Institute, Pusa, Bulletin*, 1930, *204*;

12-6636 ...600 008.

chiefly because of its physical condition—a thick, viscous mass, readily absorbing moisture. It is largely from these properties of molasses that most of the difficulties with regard to its handling and transport over long distances and distribution to land arise. Again, owing to uneven distribution of liquid molasses, as it always happens when applied as such to land, there is the difficulty of its accumulation in high concentrations in restricted areas from which it cannot be easily spread to other portions; and this would lead to the local concentrations of free organic acids and allied products formed during the earlier stages of fermentation which are of course toxic to plant growth.

In view of these and other difficulties, several attempts have been made during the past few decades to convert molasses into a solid product that will keep dry and can be easily transported. But most of the methods that have been recommended for the purpose up till now have practically failed. In addition to the expensive or otherwise unsatisfactory character of the proposed methods (Wemer and Gould, 1925; Wilkins, Reiner and others, 1925; John C. Mac Lachlan, 1933; Reiner, 1935; Dubinbaun and Christie, 1936; Sen and Dutt, 1937),* they do not, however, result in the production of a strictly non-hygroscopic product which would keep well under all climatic and weather conditions.

More recently, a significant advance in this direction has been made in this laboratory. A simple and rapid method of preparing a dry, solid product from cane molasses has been developed; and the product thus obtained has been found to keep perfectly well under all conditions. The method is based on the application of the considerable heat produced during the slaking of lime for thoroughly dehydrating the molasses and converting it into a stable compound with calcium. The procedure consists in adding freshly burnt lime in suitable proportion to liquid molasses

* Wemer and Gould, *Int. Sug. Journal.*, 1925, *27*, 676; Wilkins, Reiner and others, *Int. Sug. Journal*, 1925, *27*, 116; John, C. Mac Lachlan, *Int. Sug. Journal*, 1933, *35*, 452; Reiner, *Int. Sug Journal*, 1925, *37*, 239; Dubinbaun and Christe, *Int. Sug. Journal*, 1936, *38*, 440; Sen and Dutt, *Proc. Sugar Convention, Cawnpore*, October 1937.

as turned out from the centrifugal. The lime is added in small quantities at a time and thoroughly incorporated. In about half an hour the temperature rises so rapidly that the entire mass actually boils with copious evolution of heat. On cooling, the product sets to a solid mass which can be easily ground to fine powder.

In view of the fact that cheap lime is available in different parts of the country, particularly on the coastal areas, and also considering the simplicity of the whole process, combined with the remarkable efficiency, this method of converting liquid molasses into a dry solid product can easily be placed on a commercial basis. Thus, the difficulties with regard to handling and transport of liquid molasses (which arise from its physical condition) can be almost entirely removed ; and further, in virtue of the physical and chemical changes it undergoes during the above treatment, the final product not only finds a much more extensive use as a fertiliser, but lends itself for many useful technical operations in several industries as well.

As a mixed and more or less complete fertiliser, the new product is defective only in phosphoric acid, but this can be made up by combining the product with a small percentage of crushed bone or powdered rock phosphate or even press-mud which is available in the sugar factory itself.

The dry product can be stored indefinitely without risk of deterioration. It possesses the obvious advantage of reducing handling charges and cost of distribution to land ; and it requires no special conveyance and can be easily applied to land in the same manner as any other fertiliser. Being finely divided it gets easily distributed. Its decomposition in the soil proceeds smoothly and rapidly and is completed in a shorter time than would be the case with the original molasses. The association of lime adds to the fertilising value of the new product. And as has been explained before, it would serve as a concentrated complete fertiliser which would be particularly useful to the Indian sols.

The Wardha Scheme of Education

NO subject has received such nation-wide attention during the last year as the scheme of Basic Education outlined at the Wardha Educational Conference. The formulation of the scheme is perhaps the most significant educational move ever since the introduction of the Western system of education into this country. The Indian National Congress, at its last session, expressed its approval of the principles underlying the scheme and declared that immediate steps be taken to establish an All-India Education Board under the advice and guidance of Gandhiji to work out the programme of basic national education and to recommend it for acceptance to those who are in control of education. An All-India Education Board was formed in accordance with the resolution and at its first meeting the committee did the necessary spade work and appointed several sub-committees to implement the scheme. In view of the importance of the subject, we propose to examine in the following pages the salient features of the Wardha proposals for educational re-organization and answer the criticisms that have been launched against the scheme.

Discontent with the existing system of education. No one will deny the fact that the present system of education has failed, and has produced universal discontent. English having been the medium of instruction in all the higher branches of learning, has created a permanent bar between the higher educated few and the uneducated many. It has prevented knowledge from percolating to the masses. The excessive importance given to English has maimed them mentally for life and made them strangers in their own land. Even after a century and a half of the present system of education, almost ninety per cent of the people remain illiterate while Japan has banished illiteracy from the land in about thirty years. Absence of vocational training has also made the educated classes unfit for productive work and harmed them physically. Consequently, the pres-

ent system has been a costly experiment carried out regardless of consequences. Educated young men with brilliant records are literally thrown into the street without occupation and are forced to a life of idleness, eating away their hearts in utter sorrow. In short, the present system has failed not only because it is out of touch with the realities of the existing economic situation in the country, but also because it lacks the inspiration of any creative, life-giving ideal.

The Wardha Scheme. At the educational conference held at Wardha on the 22nd and 23rd of October, 1937, a Committee was appointed under the inspiration and guidance of Gandhiji with Dr. Zakir Hussain as Chairman and Sjt. Aryanayakam as convener to prepare a planned syllabus in accordance with the resolutions accepted by the Conference. The chief principles of the Zakir Hussain Committee report which later on were accepted by the Indian National Congress at the Haripura session are :

(1) Free and compulsory education should be provided for seven years on a nation-wide scale.

(2) The medium of instruction must be the mother-tongue.

(3) Throughout this period, education should centre round some form of manual or productive work and all other activities to be developed or training to be given should as far as possible be integrally related to a central handicraft, chosen with due regard to the environment of the child.

The report consists of five sections with a detailed syllabus for the handicraft of spinning and weaving. The several sections deal with the basic principles of the scheme, the objectives for each subject proposed to be included in the curriculum, the training of teachers, the provision of the machinery for efficient supervision, the problem of examinations and the administrative problems connected with the school.

The first and second of the principles have been accepted without question. The Report has confined its attention to a scheme of education for the children of the

age-group 7 to 14, though it points out that provision should be made for children before the age of 7. The second report issued by the Committee points out the necessity of keeping the child at school till the age of fourteen in order to ensure that he will receive the essential modicum of social and civic training in order to become a better citizen, that his literary training will be thorough enough to make a lapse into illiteracy impossible and that he will acquire sufficient skill in his basic craft to practise it successfully if he adopts it as his vocation. As the period before the age of 7 is very important in the development of the child the Committee suggests that the Government should make suitable provision for the proper training of the children of the pre-school stage.

There has been a good deal of criticism regarding the place to be given to vocational training in the scheme. Gandhiji is deliberately of opinion that the present system of primary education is not only wasteful but positively harmful. Most of the boys are lost to the parents and to the occupation to which they are born. The remedy, according to Gandhiji, lies in educating them by means of some vocational training. The core of his emphasis is not the craft or the occupation, but education through the handicraft—all education of letters, history, geography, mathematics, science etc. to be taught through the handicraft—not as separate, self-contained bodies of knowledge forced on the child for some unknown reason, but as the need for them arises in the course of his craft work.

It has to be remembered that the idea of making productive work the centre of education is not entirely original. Students of the history of education know that great educators like Rousseau, Pestalozzi, Montessori, Dewey and others have realised the importance of creative and productive work for securing an allround integral education. The psychological justification for this new conception of education can be very well understood from the following paragraph from the report of the Zakir Hussain Committee:

> Psychologically it is desirable, because it relieves the child from the tyranny of a purely academic and theoretical instruction against which its active nature is always making a healthy protest. It balances the intellect-

ual and practical elements of experience and may be made an instrument of educating the body and the mind in co-ordination. The child acquires not the superficial literacy which implies, often without warrant, a capacity to read with printed page, but the far more important capacity of using hand and intelligence for some constructive purpose. This, if we may be permitted to use the expression, is "the literacy of the whole personality"

Socially considered the introduction of such practical productive work in education to be participated in by all the children of the nation, will tend to break down the existing barriers of prejudice between manual and intellectual workers, harmful alike for both. It will also cultivate in the only possible way a true sense of the dignity of labour and of human solidarity—an ethical and moral gain of incalculable significance.

Economically considered, carried out intelligently and efficiently the scheme will increase the productive capacity of our workers and will also enable them to utilise their leisure advantageously.

From the strictly educational point of view, greater concreteness and reality can be given to the knowledge acquired by children by making some significant craft the basis of education. Knowledge will thus become related to life, and its various aspects will be correlated with one another.

Subjects for study and syllabuses. According to the report, each school is expected to work for 288 days in a year and for five and a half hours every day.

The time for the several subjects is to be distributed as follows:

Basic craft (Spinning and Weaving or Agriculture or Wood-work or Gardening or some other craft)	3 Hours 20 minutes.
Music, drawing and arithmetic.	40 minutes.
Mother tongue.	40 ,,
Social studies (including History, Geography, Civics and General Science)	30 ,,
Physical Training.	10 ,,
Recess.	10 ,,
	5 hours 30 minutes

A glance at the syllabus in the several subjects will show that a child going through the seven years' course will acquire General Knowledge gained up to the present matriculation standard less English plus a substantial vocation. The syllabus in social studies includes a study of Indian History, elements of world history, current history, a study of the different religions of the world, Geography, Civics etc. The curriculum in General Science which has for its objectives giving the pupils an intelligent and appreciative outlook on nature and forming in them habits of accurate observation and of testing experience by experiments, includes Nature Study, Botany, Zoology, Physiology, Hygiene, Physical Culture, Chemistry, knowledge of the

stars and stories of the great scientists and explorers and of their contributions to human well-being. In music the objective is to teach the pupils a number of beautiful songs and to cultivate in them a love for beautiful music. The child's natural sense of rhythm should also be developed. The study of Hindustani will be compulsory in the fifth and sixth years of school life and pupils will have the choice of learning the language in the Urdu or Devanagari script.

In general outline, the syllabus of studies will be the same for boys and girls up to the fifth year. In Grades 6 and 7, the girls will be allowed to take an advance course in domestic science in place of the basic craft. In the second report issued by the Committee, they have answered criticisms levelled at the scheme. They have attempted to show how the scheme is child-centred and not craft-centred. They have chosen three centres, intrinsically inter-connected, as the focii of the curriculum, viz., the Physical Environment, the Social Environment and craft work which is their natural meeting point since it utilizes the resources of the former for the purposes of the latter. The curriculum is an activity curriculum and all teaching is to be carried on through concrete life situations relating to craft or to social and physical environment so that whatever the child learns may be assimilated into his growing activity. There is no use of presenting the subjects such as social studies and General Sciences as catalogues of facts to be passively accepted and learnt by the children. The idea of correlation can be realised only when the facts are acquired through real learning situations involving self-activity on the children's part. A glance at the syllabus in the mother tongue will bring out this idea of correlation very clearly. The teacher is expected to organize his oral work as well as his reading material round the actual but growing life and interests of his children so that they may gradually

a) develop a consciousness of the wonders of the life of nature around them,

b) observe and describe the different process of the school crafts and the life of their home, village and school,

c) write simple business and personal letters as a normal activity of social life,

d) keep a daily record of progress in the basic handicrafts,
e) help in the editing of a school magazine and the preparation of a daily news bulletin,
f) make a clear and connected speech of a reasonable duration on some topic of general interest,
g) appreciate beautiful literature.

Regarding the basic craft, the authors of the report lay down that such reasonable skill should be attained in the handicrafts chosen as would enable the pupil to pursue it as an occupation after finishing his full course. The following may be selected as basic crafts in schools: a) spinning and weaving, b) carpentry, c) agriculture, d) fruit and vegetable gardening, e) leather work, f) any other craft for which local and geographical conditions are favourable. It is essential that the basic craft chosen should be rich in educative possibilities. It should find natural points of correlation with important human activities and interests. It is also necessary that "the handicraft has to be taught not mechanically as is done today, but scientifically. That is, the child should learn the why and wherefore of every process through personal observation and experience.

Criticisms of the scheme. Self-supporting basis of the scheme : There has been a large volume of criticism about this aspect of the scheme. While Gandhiji thought that the scheme might be self-supporting, the resolution passed by the Educational Conference at Wardha stated that the Conference expects that this system of education will be gradually able to cover the remuneration of teachers. The report of the Zakir Hussain Committee tried to clear the misunderstanding by stating. "We wish to make it clear that we consider the scheme of basic education outlined by the Wardha conference to be sound in itself and that even if it were not self-supporting in any sense, it should be accepted as a matter of sound educational policy and as an urgent measure of national reconstruction. It is fortunate, however, that this good education will also incidently cover the major portion of its expenses." Gandhiji also qualified his original statement by suggesting that the State should guarantee to take over at fixed prices the

product of the work done by the children at school and that every school can be made self-supporting, the condition being that the State took over the manufactures of these schools. The second report of the Committee has made the position very clear that teachers are to be paid directly from the State Treasury and are not to be dependent on the somewhat fluctuating income received from the sale of school products. They do not contemplate any direct connection between the teachers' salaries and the proceeds of the sales of the products. If the scheme is sound, nobody should have objection to it simply because it will incidentally cover a portion of the teachers' salaries.

Education through the crafts. The fundamentals of the scheme have been attacked by some critics who question the soundness of giving too much importance to productive work in schools. It has also been said that this scheme of education would gradually oust the regular handicraftsmen. The soundness of vocational or manual training has been accepted by great educationists all over the world, because manual training satisfies the innate desire of a child for 'doing' in preference to 'thinking' or 'learning'; it helps to discover the aptitude of the child for the kind of work he likes and thus incidentally makes the boy more peaceful and assiduous; it relates the child's activity to his environment; and lastly the child gets the conception of labour as a moral force. According to the Year Book of Education (1932), the experiment was introduced in China in 1931 and Russia also has introduced the experiment on an extensive scale. In Russia, the school is more the direct concern of the factory; it is a first charge on the profits of industry and the students spend 40 to 50 per cent of their time in the shops. It may also be mentioned the Report on vocational Education by Messrs. A. Abbot and S. H. Wood submitted recently to the Government of India lays great stress on the value of manual training. The following extract from the Report will throw light on the subject:

Manual activities should find a place in the curriculum not because the pupils will earn a living by manual labour, but because satisfaction of the

desire to make or act is necessary to balanced development. It is often the key to a boy's serenity. Not every boy enjoys manual work or is competent at it, but the same is true of other subjects such as mathematics or languages which are nevertheless taken for granted as subjects of the curriculum. Manual work or constructive work is educative while it is being planned and at the actual moment of execution. It may lead pupils to acquire interests which will stand them in good in their leisure hours; and the importance of education as a means of enabling young men to substain with dignity the intolerable leisure known as unemployment cannot be overstated.

Exploiting the child. It has been said that the scheme of compulsory education is opposed to all ideas of non-violence and that it is cruel to compel a child to do manual work for 3 to 4 hours a day. To compel a child of seven or eight to sit for three hours and spin, which is most tedious and tiresome work, in order to pay the teacher so that he can go home and have his meal while the child may not have a meal the whole day long, is considered cruel exploitation. But Gandhiji answers this by saying that the object of the educational scheme is not primarily the production of craftsmen able to practise some craft mechanically but rather the exploitation for educative purposes of the resources implicit in craft work.

Too much time given to craft work. Much criticism has been directed against the amount of time devoted to craft work and it has been argued that academic work will be starved in consequence. In answer to this, the Committee, in the second report, point out that the period of 3 hours 20 minutes is the maximum, that all the time is not to be spent on the mechanical practice of the craft, but oral work, drawing and expression work as well as instruction in the why and wherefore of every process involved should also be given during this time. There is, therefore, no justification for the fear that culture will be neglected.

Subjects for study. It has been remarked that it will be impossible to correlate all subjects of the curriculum to the central handicraft. Suggestions have, therefore, been made that more than one handicraft may be introduced in the same school and that it should be made possible for school authorities to give facilities for instruction in subjects other than those included in the scheme.

Salaries of teachers. Teachers' Associations have pointed out that the salary proposed is very low in view of the qualifications expected of teachers. While the initial salary proposed in the scheme may be accepted, it must be remembered that in order to draw the right type of men and women for the profession, suitable scales of salaries should be offered consistent with the teachers' academic qualifications and training.

Opposed to Industrialization. Opinions have been expressed in certain quarters that the scheme is opposed to industrialization and aims at harking back to a primitive state of society. These fears have been proved to be groundless. This scheme of education with the training of the hand and eye will, on the contrary, facilitate industrialization.

Some outstanding features of the scheme. It is the most significant educational move in this country during the last century and a half, based as it is on sound principles of education tested and proved in other countries. It is a scheme of seven years free and compulsory education through the mother-tongue, the education to be imparted through some basic craft which should provide the nucleus of all the other instruction provided in the school. It envisages the idea of a co-operative community, in which the motive of social service will dominate all the activities of children during the plastic years of childhood and youth. It is a very practical scheme that will bring about cent per cent literacy in the land in the near future say 20 or 25 years.

It is a scheme which would add to the wealth of the country. The chief wealth of the country is its millions of men. Every one of them must be able not only to read and write but contribute his or her humble bit to the wealth of the land. Otherwise these millions will constitute a huge waste on national resources and prove a drag on the country. The Wardha scheme will surely help every citizen to add his bit, be it ever so small, to India's wealth.

Tales from Indian History.

Sahibji, the Heroic.

By V. RANGACHARYA, M. A.

Among the numerous women of the Mughal period who have left sweet and fragrant memories which have endured in the pages of history, Sahibji, the beautiful and valiant wife of Amir Khan, the Afghan Governor, is one of the most remarkable. Sahibji was a daughter of that time-serving Persian soldier, Alimardan Khan, who purchased the highest rank in the Mughal court by betraying the trust of his Persian sovereign and handing over the much-coveted city of Kandahar to the Mughal Emperor, Shah Jahan. Amir Khan, her husband, was the son of a Persian nobleman, Khalilulla Khan, by a niece of the celebrated Empress, Mumtaz Mahal. Thanks to his high birth and connections, Amir Khan himself was given a high rank in the Mughal court and honoured with responsible gubernatorial or military positions.

Sahibji was a woman of talents. Her wits were a match for her agreeable qualities, and her virtues held her husband in bondage. Her presence of mind is illustrated by an incident in the early stage of her conjugal life. She was once going along a lane at Delhi in her *chaudol* or sedan chair, when the emperor's elephant, which got out of control, came violently against her. " Her attendants wanted to turn it back. But the mahouts as a class are vicious, and this one was further proud of being the emperor's own driver. So he urged the elephant rashly onward. Her escort pulled out their arrows from the quivers; but the brute flung its trunk on the *chaudol* to seize and trample it down. The porters dropped it and fled. Quick as thought Sahibji jumped out, ran into a money-changer's shop hard by, and shut the door. This was no common feat of agility, as a Muslim noble-woman travelling on the public road must have been securely wrapped up like a

parcel sent by post in the rainy season."* Sahibji had saved herself; but only to find that, in the eyes of the conventional men of her age and creed, she had lost her honour! How could a Muslim woman, the wife of an officer to boot, throw off the purdah? Life, certainly, was not more precious; and Sahibji had given up a more precious possession in exchange for safety! Amir Khan was a creature of his times. He could not rise above his environment. He was not immune from the social prudism of his age and rank. Wrenching his heart, therefore, from his life, he banished his wife to a lonely life! He denied her his home, and felt that he could not go back to his old days.

Sahibji was taken by surprise. She had hardly dreamt of the gap which had so suddenly yawned in her life. But she was a proud and spirited woman. She did not even wrinkle her brows. She refused to put on a mutinous air, and be a target for sensational scandal. An ordinary woman would have shed tears at the sensationalism which her life had become. She would have cursed her fate, cursed herself, cursed her husband, and cursed the world. But Sahibji took the sentence on her with calm and philosophic equanimity. Refusing to be lashed into rebellion by an unkind and unexpectedly irritant fate, she drew the curtains more tightly, and withdrew into the darkness. Within the closed door she might have had her cynical laugh at the waywardness of life's experiences; but she did not drop a shred of her dignity in public eyes.

Nor was Amir Khan happy. In an incredibly short time he missed the company of his wife! Amir had no lack of the harem. The Mughal noblemen never denied themselves the luxuries of life. Fashion and usage made a life of epicureanism the rule, and Amir Khan was no exception. And yet he realised, sooner than he acknowledged to himself, that life without his wife gave him only a delusion and a glamour, not a reality of, happiness. In the midst of the feminine crowd he felt himself to be

* Prof. J. Sarkar in his *Studies in Mughal India*, pp. 115-6. The present story is based on Prof. Sarkar's account which, ni its turn, is based on the *Masir-ul-amara*, a Persian chronicle of this period.

lonely. He felt as though a part of himself had been torn off from him. He became conscious of the fact that, by himself, he was an incomplete personality. He knew that Sahibji was not a frivolous woman, but one of strong mould ; and yet he could not think of her without the tears in her eyes. He felt that his mind was dead to the world. In a word, he was home-sick.

Emperor Shah Jahan heard of it, and was struck with the banalities of orthodoxy. He regarded, both with amusement and contempt, a course of conduct which could appeal only to one whose eyes were completely blinded by the cataract of conventionality. He called the sheerish officer to his presence, and gave him a bit of his mind.

"Amir Khan, the rumour goes that you have banished your worthy life-partner from your household."

"True, my lord."

"Why ? Doth not the Prophet say that woman is sacred ? And such a gem as yours ! Man, you must have a heart of stone."

"Not so, Your Majesty. How can I go against custom? Sahibji has disgraced herself by breaking custom?"

"What ! Silly, indeed you must be, to be so blind to the ordinary dictum that kindness is the truest chivalry. Wrapped by the thick hide of pharisaism, you have taken leave of common sense. None will agree with you as to your method of estimating your couduct as well as your wife's."

"Have I erred, my lord ? None, in truth, has been so unhappy as myself !"

"Be true, then, to justice and humanity, as well as to your feeling. She has done no wrong ! She is as pure as purity. Could she have avoided the open eyes of men if she had clung to her seat and been dragged, exposed and mangled by the beast ?"

"I thought of it, Your Majesty. But public opinion is cruel. It shows no mercy. It judges, and condemns, without the sense of personality."

"You may be a good officer, Amir Khan, but you are not a kind man ! You are little in the great things of life.

You have not seen that by her behaviour, your wife has saved her honour as well as yours."

So Sahibji was taken back, to preside over her husband's household. We have no clue to the nature of her conjugal life ; but there is nothing to show that she was unhappy. In one respect her life was incomplete. Providence gave her no children. There was no juvenile entity on which she could have bestowed her heroism and courage. Life was a blank to her in the most important aspect of femininity ; but to make up for it Sahibji had a generous soul which enabled her to be happy enough. Her face was at first sad when she came to know that her husband had a secret harem and was not without children ; but, realising that maternity was denied to her, she refused to allow a shadow to fall between them and divide them. She embraced her step-children within the fold of her affection, and the joy in bringing them up gave her face as many brightening dimples as she would have had as a mother.

But Sahibji was destined to play a much more important part than that of a happy domestic woman. She was a fit companion of her husband as a soldier and administrator. Amir Khan was first appointed as the guardian of the Jammu hills, and then as the leader of punitive raids into the Yusufzai country. His life was led amongst the terrible hills which pierced to the sky through clouds of nature as well as of incendiarism. The tribesmen whom he had to check or conquer were not over-mild ! It was but too common to see the smoke of burning villages among their rude crags and rocks ; and it required all the courage and daring of the valiant soldier to keep order.. But in doing this he had no small help from his wife. Ever ready to be within the reach of the enemy's fire, she braved battle and death; and when her husband came out victorious from his raids into the enemy's villages or with spoils in the form of the enemy's herds, he had no more enthusiastic helper than Sahibji.

Amir Khan had subsequently a more peaceful charge. He was appointed Governor of Bihar ; but even while occu-

pying this position he was entrusted with the mission of subduing the rebel colony of Afghans at Shahjahanpur and Gola in the area of the old Panchala kingdom and of the later South Bareilly region of the United Provinces. Shahjahanpur had been founded by the Mughal General, Bahadur Khan, in the name of Emperor Shahjahan about A. D. 1647 after dispossessing the local Rajputs; and its Gokarnath temple is known for a miraculous incident in connection with Aurangzeb's fanaticism. The iconoclastic instinct was always a prominent characteristic of that monarch; and he tried to pull down the local Linga with the aid of elephants and chains, and gave up the project on seeing a miraculous outbreak of flames! The iconoclast is said to have given an endowment in wonder and repentance. Amir Khan's victory over the local Afghan rebels has been graven on the stone of history. In March 1697 the intrepid soldier was appointed as the Subedar of Afghanistan itself. For the next 21 years he was in charge of this extremely turbulent province. By combined force and diplomacy he kept the local tribes in comparative powerlessness; but in doing this he had an unsurpassable lieutenant in his wife. Sahibji in fact ruled her husband and the Afghans. Her diplomatic skill was more skilful than the mightiest feat of arms, and her brave qualities set the chord of even the ballad-singers at vibration. A respectful applause greeted her from the most unyielding of men and women. She made them think not of themselves alone, but of others as well. Her daring and self-confidence was not baffled by their fighting spirit. The roughest men saw her unmoved and, thanks to her improvement of every difficult occasion with consummate skill, went away appeased. And where this was impossible, her woman's wiles set the tribesmen at loggerheads with each other, and kept them too busy to be a thorn to the empire.

But fate was an invincible foe, and Amir Khan eventually met his death amongst the Pathans. His leaderless troops were in serious danger, and disaster would have quickly swooped down on them but for the tact of Sahibji. She made one of her followers act for Amir Khan and sit

in his palanquin; inspected the ranks every day as if nothing had happened, receiving their customary salutes and greetings; and published the fact only after she reached safely her headquarters. The Afghan chiefs would have at once rebelled; but they were wise enough to see that Sahibji was as good as she was strong, and when she said that the ball and the polo field were ready for their reception they knew what it meant, and saw that the storm did not burst over their heads.

Amir Khan died in 1698. The emperor at once felt the void in the situation. He realised that the days of peace and lack of anxiety so far as the North-west province was concerned was gone. Addressing Arshad Khan, who had once been the Diwan of Afghanistan, he observed: "A great difficulty has cropped up. Amir Khan is dead. That province which is ever ripe for a thousand disturbances and troubles, has now none to govern it. A disaster may happen before the arrival of his successor."

"But, Your Majesty, Amir Khan is not dead."

"Here is the report from Kabul. His grave has closed over his remains."

"Not so, my lord. Amir Khan still lives, because he never lived"

"You are mysterious."

"I am true, my lord. While Amir Khan lived it was his wife Sahibji that ruled the tribesmen and kept them at bay. The mountain-sides were tranquil at her command. The voice of the fighting men was one of comrades. The Mughal provinces were immune from their raids. They became friendly; and there was a wealth of loveliness instead of battle."

With a voice of relief the emperor replied: "Yes. The hardest and the toughest of men had been on their knees before her. A wonderful woman she is! A rare level-headed super-woman who had a far better head than her husband."

"May I suggest to Your Majesty to put trust in her and ask her to be in charge of the province? Though a woman she alone can face the music."

"Yes. We think so. Let the order be sent charging her to be in the province till a fit successor could be found."

Thus it was that Sahibji continued to rule the province after her husband's death for two years. And it counted much for the emperor's fortunes in the south, where he was leading a forlorn hope against the Mahratta. But for the right stuff he would have been in serious trouble. In 1700 she was relieved by another Subedar, and she closed her career with an ardent pilgrimage to Mecca and Medina. There she proved her capacity to shine in the tender light of humanity as she had done in the fields of war and diplomacy in India. Her widespread charities were in the lips of officers and poor men, and her voice kept vibrating in the hearts of the sick and the poor.

The Boy Who Went to Moy Elga

They say a missal-thrush you should follow
He brings a message as he sings
So I went down hill, and up thro' hollow
Always pursuing those swift brown wings.

And this was his song, "The Fairies await,
Your partner expects you, the music rings,
Come, leap across the bounds of Fate
A king should be with his brother kings."

'Neath hazels' shade was the Place of meeting
I saw the Shee, and their Joy I found
A Princess met me with loving greeting
I dance upon enchanted ground.

Farewell, old world of toil and sadness:
Good-bye, for ever and a day
Here is unclouded radiant gladness
And the Wonderous Dance which is for aye.

Moy Elga, Fairyland. *F. H. Aldhouse.*

Current Comments

By AN OBSERVER

Income Tax and Economic Conditions. The Report of the Income Tax Department, Simla, for 1936—7 indicates the merits and defects of the system. The efficiency of the department led to the discovery of more than 64000 new assessees who had been deceiving the government, with the resultant gain of three crores for the Exchequer. As this is nearly 25% of the total collection from the tax, it cannot but be said that the civil sense of the people is deplorably low. The devices of the evaders of the tax have been ingenious. Double sets of accounts, false totals, and false statements regarding purchases, sales and stocks were very common. An assessee who gave an account of a loss of Rs. 719 was discovered, on scrutiny, to have gained a profit of Rs. 55300! A cloth merchant who gave figures for an income of Rs. 3120 was discovered to have got nearly Rs. 16500. The total demand for the year was 18·5 crores, and the net collection 16 crores. The previous years' collections were:—

1935—6	20·5 crores.
1934—5	18 ,,
1933—4	17 ,,

The abolition of the tax on incomes between Rs. 1000 and 2000 and the reduction of the surcharge from one-sixth to one-twelfth of the tax during 1936—7 was the cause of the smaller proceeds.

The economic conditions of the different provinces during the year are in a way indicated by the figures. In Madras affairs were not quite satisfactory.

"In the northern districts rice and paddy trade was adversely affected by competition from outside provinces, and a number of rice mills remained idle, and dealers in paddy and rice made little or no profit. Ground-nut trade also fared badly owing to the utter failure of crops. The cotton crop was poor, and cotton mills made small profits. But prices of coffee, tea, paper, copper, areca nuts and potatoes remained more or less at their usual level, and there was no appreciable increase in profits from these commodities. The fall in the prices of agricultural produce affected the income of rural moneylenders who found it difficult to realise their dues. Business in motor cars and hides and skins yielded fairly good profits, while there was increased activity in the film industry which bids fair to develop on successful lines in the near future. In Bombay, the improvement in trade which started in the year 1934—35 continued. There was no appreciable increase in the price of important commodities such as cotton, on which the major part of the trade of the province depends."

In Bengal, though there was no downward tendency there was no appreciable improvement in trade and industry. Tea and

jute yielded higher revenues, but coal, engineering and steam-ship companies gave less. Paper mills, electricity and insurance companies did well. The sugar and textile industries of the United Provinces showed no improvement as compared with the previous year; but oil factories were much more prosperous, and iron and hardware fared well. In Bihar and Orissa the coal mines passed through crises on account of labour troubles, and still had an increased output. Copper and iron were prosperous, and sugar had a contrary experience owing to the fall in its price. The Central Provinces did not yet recover from the depression, and in Assam the tea industry was on a par with that of the previous year while professions and business had some improvement.

The Report throws light on the Cooperative movement, and shows that it was not quite satisfactory. It did not oust the money-lender in the majority of provinces though there was a tendency for less usury in rural money-lending. In Madras, Bombay and Bengal the private money-lender was still having an active trade. The same was the case with Bihar, Orissa, and the Central Provinces In the Panjab both the money lenders and the Co-operative Societies deteriorated owing to the fall in agricultural produce, and rural money-lending decreased a little owing to the legislation to give relief to agricultural debtors. In the United Provinces "the cooperative movement received some impetus due to the passage of the Agriculturists' Relief Act and the Encumbered Estates Act, as since their passage the money-lenders have been very reluctant to advance loans to landholders and agriculturists". The latter were, therefore, compelled to turn to co-operative societies for help, and the organisation was, in consequence, making some headway in villages.

Anatolian Culture. The recent discoveries of the Turkish Historical Society at Alaca Huyuk in the Halys Basin are of great interest inasmuch as they are helpful to a comparative study of ancient cultures. These have revealed several remarkable royal tombs going back to the third millennium B. C. A striking feature in them was the presence of beautiful metal works in patterns hitherto found in clay alone. Gold, copper and silver vessels, now placed in the Ankara Museum, indicate a high technical level of execution. The beaked jugs, cups and keeled bowls are particularly good. They show the connection between the Anatolian and early Aegean cultures on the one hand, and the Anatolian and Kuban culture of South Russia on the other. To the students of Indian History it is interesting to note that the Anatolian finds not only include figures of stags and human beings in copper and silver, but standards in which the *Svastika* appears. One of the elaborate *Svastika* works resembles the

design in the *chakra* weapon of Vishnu. Iron also was used for ornaments. While there was an abundance of jewellery and metal works, the Anatolian remains had no writings or seals. They show that the metallic knowledge of ancient Troy was transmitted from Asia Minor. The influence of the Asiatic culture on the Trojan craftsmen too is clearly demonstrated. The metallic and stone tools familiar in Troy and Central Europe had their origin, to some extent at least, among the townships in the region of Ankara which were already busy in the third millennium; and it would be very interesting to see how far there was connection between these and the rich and flourishing cities of Sindh culture.

Kerala Academy. In the 12th Session of the All-Kerala Literary Academy at Kottayam in the last week of April, His Lordship Dr. Attipetti, the Archbishop of Varapuzha, pleaded for the unification of 'the three political units of Kerala' in political, social and cultural matters through the activities of the Kerala Literary Academy. While appealing to the general public for more liberal patronage to men of letters, he appealed to the latter to take a wide outlook and work for the ideal of a united Kerala, without being obsessed with the idea that literature belonged to certain communities or classes. Mr. K. C. Mathew, the Chairman of the Reception Committee, referred to Kottayam as an ancient educational centre where, thanks to the activities of missionaries, women's education was first started. He pleaded for a permanent office, library and exhibition hall for the Academy where the lovers of Malayalam Literature could meet in brotherly conclave. The Academy, he pointed out, should bestir itself and find a solution for the comparative scarcity of Malayalam books. Cultural and economic treatises useful to the masses, he said, are the needs of the day. A Malayalam lexicon should be undertaken by the Government and University, and a script based on the Roman, he pointed out, might be introduced. Mr. Malloor Govinda Pillai paid a tribute to the Christian Missionaries of a century ago and the Catholic monks of the monastery at Mannanam, and emphasised the necessity for a larger output of novels, biographies and scientific manuals. Mahakavi Ulloor Parameswar Aiyar made a strong advocacy for linguistic research for developing the Malayalam language, and Mr. P. Anandan Pillai advocated a more copious output of romantic literature. The Academy is doing very useful work, and the appeal for a permanent accommodation for it is a pressing one.

Ajanta. A somewhat startlingly new interpretation of the nature of the Ajanta art is attempted by Arunadevi Gupta in a recent issue of *The Hindu*. She believes that the guide books praise it for wrong things and that the talk about the typical Indian-ness

of the Ajanta art is 'nonsense.' Her own opinion is that, though the frescoes are conceived in a highly conventional style and the treatment and subjects are delicate, they are 'markedly frivolous.' She suggests that the subjects of the paintings were "chosen to delight wealthy, light-minded visitors to the fashionable pleasure-resort that this place must have been once upon a time. It is a good style for such subjects but a very bad style for expressing the serious ideals of modern everyday men and women." She also doubts whether the best pieces were the works of Indian artists at all, and she cites as such non-Indian works 'the few delicately-carved groups of lovers in one of the ceilings and the portraits of gentlemen wearing socks in one of the ceiling frescoes.' The writer believes that Ajanta must have been a busy fashionable resort, with plenty of cultivated farms and gardens, with safe places to bathe and grow lotuses in; a thriving town where 'the early heavy carvings, copied badly from such places as Ellora, were covered up with colour and surrounded by gay pictures to amuse a gay company of cultured wealthy people who took their Buddhist religion as lightly as most modern people take theirs.'

The Zanzibar Clove Trade Settlement. One of the most sensational victories which moral right has gained by a righteous resort to economic boycott is that of the Indians in Zanzibar. It has been a well-recognized fact that till recently Zanzibar was, almost alone among the regions to which Indian emigration has taken place, a region of harmony and good will. Indians form 6% of the population. and are traders in the main. The traditional friendships of the Sultan with the Indian settlers, the cordiality between the Arabs and the Hindu traders, the growing number of Indian plantations and size of Indian trade business, have been the striking features in the situation. There has been also a complete freedom from the hostility of the hundreds of European settlers who have gone there for the clove business.

The harmonious atmosphere was no doubt due to the treaty of 1886 by which the Sultan bound himself not to allow or recognize the establishment of any kind of monopoly or exclusive privilege of trade within his dominions to any government, association or individual. This treaty was later on incorporated in a fresh treaty in 1898.

The staple industry of the island is clove. Though it had occasional crises as in 1896 and in 1929 (when a committee discussed the question of rationalising its export), it has grown to large proportions, and India is taking 40% of the supply; and it is vital for the finance and economic welfare of the Protectorate. The cultivation of clove trees is in the hands of Arab settlers and Africans in the main, but these became of late indebted to Indian

money-lenders with the result that there was much transfer of property. The Zanzibar Government, which is under the Colonial Office, thought that there was much danger in this alienation of the lands of the Arabs and Africans in favour of Indian creditors and purchasers. Government therefore passed a law in 1934 restricting the Arabs and Africans from selling their land to Indians. A moratorium was also declared*, and as the result of it numerous investors lost all their resources and means of living. They had sunk their money in cloves and cocoanut, and were threatened with ruin as they could not get their loans repaid. One remedy was open,—to go back to India; but to many it was not known at all, it was a foreign land. The moratorium in respect of debts due to Indians was to expire on 15 December 1936, and as the Resident assured an amending legislation, the agitation was stopped.

Just at this stage, in July 1934, a Clove Growers' Association was established, and it was given by the Government a number of exemptions and privileges. Private export was made subject to license. The license fee was to be heavy, and the Association itself was to be the licensing authority. Further, it was to enjoy exemption from all fees including the levy which other exporters had to pay. It was stated by the Zanzibar government that the step was necessary to prevent unstable prices and speculative dealings. A minimum price was to be fixed for the grower, and the industry should be free from other restrictions. As the Association was to have the monopoly of the internal purchases, the native growers were expected to have the benefit of steady prices.

But this meant that Indian buyers and exporters were dealt a death-blow. They ran the danger of extinction from the business altogether. They regarded the Association's operations as a gamble with public funds and as far more speculative than private dealings. It combined the functions of Government control and trade rivalry. It killed the business of the Indians who had been already deprived of their capital and land, though they had been highly instrumental in developing the industry.

The agitation against the debt and land legislations and the decree sanctioning the establishment and working of the Clove Growers' Association led, on 1 April 1936, to the appointment of Mr. B. H. Binder, a London expert, by the Secretary of State for the Colonies, "to review the position of the Zanzibar clove industry and, in the light of the experience which has now been gained through the operations of the Clove Growers' Associa-

* Experts like Sir Alan Pim, Mr. Strickland and the Law committee held that there was much exaggeration of indebtedness.

tion, to report whether in the permanent economic interests of the territory as a whole, any and if so what modifications are necessary or desirable in the system of control as it now exists." Mr. G. S. Bozman I. C. S. was sent by the Indian Government to help Mr. Binder and to see that the Indian view-point was adequately placed before him.

Mr. Binder's Report was a capable and thorough one, but it was entirely based on the profit and loss, on what was needed by the industry alone, without any regard for past history or consideration of the human factors. He recommended that the Clove Growers' Association should continue and have the exclusive monopoly of internal purchases from the growers at prices fixed by them; but he also recommended that the licenses for export might be issued by the Zanzibar government instead of by the Association; that the license fee should be reduced; and that two Indians should be included in the Advisory committee of the Association to fix the prices etc. Mr. Binder expected the Association to be a sort of Cooperative Society for the whole industry, and bring great security and advantage to the clove growers through steady and equitable prices. He argued that, as 20 per cent of the growers were under Indian control on account of the mortgage of their lands to the latter, the stabilisation of prices through the Association's monopoly would be for the benefit of Indians as well. As the export license was to be issued by Government and not by the Association, as the license fee was to be reduced to a sum within the means of the small exporter who would be useful in exploring and bringing new markets, Mr. Binder hoped that there would be a satisfactory solution for all concerned. As for the alienation of lands Mr. Binder suggested that Government should publish a revised formula defining the agriculturist and non-agriculturist without racial discriminations. He also recommended the raising of the moratorium with suitable restrictions and the limiting of the rates of interest. Mr. Binder held that his recommendations would, besides broadening the economic position, provide an electorate on the satisfactory basis of agricultural and trading interests.

The Binder Report did not satisfy the Indians. They said that it was a document which cared only for market, price, and efficiency, and ignored the human factor. It faild to see that a community of middle-men and traders who had been responsible for the prosperity of the industry would be eliminated and ruined. According to the Report Indians could have business only as the agents of the Association for buying cloves in the island, and they were not sure that they would be employed as

such. They regarded the government's power to issue licenses as illusory as the Association was practically a department of the government. They regarded the appointment of Indian representatives in the Advisory committee as good, but they believed that it was not of much use as it was the system that was to blame. They said that the appointment of Indians gave no guarantee against racial discrimination.

The recommendations of the Binder Report were not approved by the Indian Government also. It agreed with the dictum of the Indians that it would eliminate them from the clove industry. The Imperial Citizenship Association and the Indian National Association of Zanzibar agitated strongly against it. They contended that the continuance of moratorium was an unparalleled expropriation of a commercial community; that the Indians either held or had a lien on 8 lakhs of trees out of three millions*; that this situation hardly justified a drastic measure threatening their existence particularly in the light of the fact that they had been connected with the industry for a century and further had passed through unprecedented depression since 1930; that it was inequitable to harass a long-settled community; and that ecnomic considerations alone should not move the authorities, without an eye on the political repercussions. They contended that the Clove Growers' Association was not cooperative; that its profits did not go to the growers; that it was practically a European syndicate; that the real need was a Loan Society and not one of this type. Cooperative Societies of producers and purchasers, they said, would discharge the functions of the Association better, and without starving hundreds of middlemen. They condemned what they regarded as practically a State control of industries, and recommended debt conciliation boards instead of continued moratorium.

In March 1938 the Colonial Office, thanks to Lord Dufferin, the Under-Secretary for Colonies, made some changes, but these did not alter the situation. Indians thereupon resorted to a system of passive resistance and boycott. They refused to be the agents of the Clove-Growers' Association, and held it as tantamount to voluntary annihilation. They induced the merchants in India not to take the cloves sent from Zanzibar. They obtained the sympathy and active help of the Congress, and made the boycott a powerful weapon. A resolution in the Central Assembly on their behalf did not succeed owing to the moderate attitude of Government and the lack of support of the Independent party under Mr. M. A. Jinnah. The latter agreed with Government

* A committee presided by Mr. Law estimated the Indian holdings at 18% of the whole.

in the wisdom of coming to a working agreement with the Association, so that the interests of the Indians were not prejudiced. He contended that it was not a European syndicate for exploitation, but a marketing board of the Zanzibar Government in which Indians had a place as advisors like the two Arabs and Africans and the two officials Mr. Jinnah suggested to Government the appointment of an Indian Agent, and as the Government promised to move in the matter, he expected no danger for Indians in future. Mr. Jinnah believed that the working arrangement with the Zanzibar Government and Clove Growers' Association would, while not bringing ruin on Indian traders, ensure the benefits of the Arab and African cultivators who are mostly Muslims.

The Zanzibar Indians, however, succeeded, with the help of the Congress, in effectively organizing the boycott in India, with the result that the present settlement has been arrived at. The Clove Growers' Association should not, under the pretext of protecting the producers, squeeze out the Indian dealers. The fees for licenses in export trade will continue, but the clove-growers can sell their produce either to the Association or the licensed dealer. The Association and Government will fix the prices for the season, but the former will not interfere with other purchasers through undue agencies or credit facilities. Nor should the Association interfere with the *normal* flow of exports, but it should determine the fittest markets for the different grades, be guaranteed the purchase of 50% of its accumulated stock for export, and continue the arrangement for transports in collaboration with Government and an advisory committee of Arabs and Indians. The Indian advisers in the Board of Management should be chosen by the Resident from a panel submitted by the Indian Associations, and the whole scheme should be worked wholly in the interests of the Protectorate.

Book Reviews

The Ramayana of Tulsi Das by F. S. Growse, B. C. S., M. A. (Oxon), C. I. E. (Seventh Edition) Published by Ram Narain Lal. Allahabad. Price Rs. 4. Pages 671 + xxv.

The great epic Ramayana by the poet-sage Valmiki possesses a mystic significance, as well as the poetic charm. To the student and the spiritual aspirant this epic has a peculiar fascination. Sri Rama, the hero of the piece, is a valiant prince and also an incarnation of Vishnu, one of the Indian Trinity. Tulsi Das rendered the sanskrit version into the popular Hindi vernacular, He was more of a poet and a Bhakta, and as such introduces Sri Rama to us more as an ideal prince. Besides emphasising the Bhakti aspect, he takes the opportunity to deal with the popular living faith of the Hindu race. The differences of treatment of topics by Tulsidas seem to be, at certain places, independent of the Valmiki version. Yet, the sincerity and poetic grandeur of Tulsidas, endow his work with an unique attraction.

Mr. Growse, by translating from the original Hindi the Ramayana of Tulsidas, has done a great service to the English knowing public. At a time when Hindu India is becoming unfamiliar to the educated Indian, translations of this sort are veritable godsends.

It is regrettable to note, that in spite of seven editions, certain avoidable mistakes have been left unnoticed. In the very first page Mr. Growse ingeniously explains the introduction of the monkey King closely after the poet, as due to the similarity of name (Kavisvara and Kapisvara). Valmiki as the original author and Hanuman as one of the major actors of the drama are always reverenced by Rama Bhaktas, and not on any account due to similarity of name. Similar explanatory foot notes, though well-meaning, are misleading. For instance, on page 208, the explanation of *Kankana Dharana* and *Kankana Vimochana* shows the author's lack of first hand information about Hindu manners and customs.

R. Mahadevan.

Self-expression and the Indian Social Problem by Satya Dass. Published by the author, Sharma Niwas, Chatterji Road, Lahore. Price Rs. 2.

This is the second book in the "Rational Spiritual Series" and continues the ideas in the first one "Rational Spiritual Idealism". As the title indicates, the book contains the author's theories about self-expression and his analysis of the Indian social problem. Self-expression is the principle of development. Society in India is so ill organised that self-expression is almost impossible which, therefore, causes degeneration.

The author seems convinced that religion is the most important factor in what he calls India's degeneration, that India is pre-eminently materialistic, that the West is really spiritual, that Western civilization is the one that really deserves the name. Our philosophy unnerves our people and makes them idlers and cowards; our idolatry is proof that we are materialists. Tyrannised by religion in the form of temples, priests etc., our people

gradually deteriorate for want of self-expression. The author burns with righteous indignation whenever our religion, philosophy or civilization is mentioned. He then gives a picture of the ideal world.

The theories about self-expression do not require any particular mention, because they are quite familiar. Regarding the views on our culture etc, we have only to make this remark: that a dispassionate view of a problem means seeing both sides of the question and not harping upon one's fond notions. Such a dispassionate study of the East and West will, we hope, bring the author to his senses. Our Society has its defects, as every society has. But to ascribe every evil to religion is hardly fair. It is rather too late in the day to felicitate Western civilization on its superiority over the Eastern.

Glances at Islam by Valji Govindji Desai Price As. 3. The Navajivan Press, Ahmedabad.

This little book of forty pages contains four essays on Islam by a person who approaches the subject in a spirit of love and reverence. The essays show the necessity for mutual understanding and also give the Prophet's views on Toleration, Violence, Conversion and the position of women. The pronouncements of the Prophet and the quotations from the Koran show that all religions are essentially one and that the so-called differences are only superficial and artificial. A knowledge of the holy books of other religions is an unfailing instrument for mutual understanding, and this book is to be welcomed as an earnest attempt in this direction. It creates the desire to study Islam, shows that a deeper scrutiny of our issues would reveal that we have been quarrelling over names and not entities, that mutual adjustments and appreciation are quite possible. It deserves the widest publicity at a time when the problem of Hindu-Muslim unity is engaging the most earnest attention and taxing our brains to an enormous extent.

S. Vaidyanathan.

Junior Essays with Outlines. By H. Martin, M. A. Published by K. & J. Cooper, Publishers, Bombay.

The book contains one hundred and fifty essays on a variety of subjects — domestic and wild animals, familiar objects, well-known events, common scenes at home and abroad, bazaar scenes, Railway station occurrences, biography, and essays on very useful abstract subjects also. Attempt is also made to give the pupils a training in the expansion of ideas contained in wise saws. The essays are short and simple.

The outlines supplied at the beginning of the essay are a special feature usually omitted in other text books of the kind. They teach the reader what to say on a subject, and in what order to say the same. Such a division of topics into several well-arranged subheads to be developed into small paragraphs gives the pupil the necessary preliminary training at essay-writing.

Sentences and sometimes paragraphs begin with an 'And' — vide essays on 'Cleanliness', 'Punctuality', 'Kind words' etc. — a construction indulged in, justifiably though, by the writer, may not be easily imitated equally correctly by young readers, and as such cou'd have been safely avoided.

The book can be profitably used by pupils of Forms IV to VI.

N. R. P.

126636.
600 008.

SRI SIVAKAMI-NATESA NIDHI,

H. O. CHITTUR—COCHIN

Branches: **PALGHAT & TATTAMANGALAM.**

Opens Current & Savings Bank Accounts & allows interest at 4½% & 6%.

Receives Fixed Deposits for periods of 6 & 12 months at interest (Payable Half-yearly) of 6% & 7½% p. a.

Deposits for credit of account received AT PAR at the following centres :

Purchases & sells Demand Drafts & Cheques & undertakes collection of Bills on the following centres at competitive rates.

Ahamedabad	Gobichettipalayam	Shiyali
Alleppey	Karaikudi	Tadepalligudam
Anakapalle	Kottayam	Tanjore
Bangalore	Kumbakonam	Tinnevelly
Bhavani	Madras	Tiruppattur
Bombay	Madura	Tiruppur
Calicut	Mangalore	Tiruvarur
Chidambaram	Parvatipuram	Trichinopoly
Cochin	Pollachi	Trichur
Coimbatore	Pudukottah	Trivandrum
Conjeevaram	Salem	Tuticorin
Ellore	Salur	Virudhunagar
Erode	Shevapet	Vizianagaram

BANKING BUSINESS OF

EVERY DESCRIPTION UNDERTAKEN

Further Particulars may be had from

C. S. SADASIVA IYER,

Sole Proprietor.

HEALTH IS WEALTH

You can keep yourself clean and healthy by regular use of

KERALA COALTAR SOAP

DISINFECTANT AND GERMICIDAL

GUARANTEED PURE

AVOID SPURIOUS IMITATIONS

Manufactured by

Kerala Soap Institute, Calicut.

By APPOINTMENT TO

HIS EXCELLENCY THE MARQUESS OF LINLITHGOW

VICEROY & GOVERNOR GENERAL OF INDIA

AND TO HIS EXCELLENCY

THE GOVERNOR OF MADRAS

AMRITA SARSA

Cures Primary, Secondary and Tertiary Syphilis, ulcerated sores, black pimples on the face, glandular swelling, scurvy sores, blood and skin diseases, and is a marvellous remedy for impoverished blood, nervous debility, premature decay or want of strength and energy and the fearful complaints. Any one who has used it will not deny the fact that "**Amrita Sarsa**" is the best blood Purifier and a charm that infuses fresh vigour into the system.

The mixture is pleasant to taste and is free from any injurious ingredient. It is perfectly harmless in its action and is equally efficacious to the healthy and the diseased.

Price: 1 phial ***Re. 1.*** 3 phials ***Rs. 2-8.*** Per dozen phials ***Rs. 9.***

Postage: ***As. 8, Rs. 1-1-0*** and ***Rs. 2-13-0*** respectively.

MAHA SASARISTA

The great remedy for all kinds of Cough and Asthma. There is no other disease so painful and intolerable as that of Cough and Asthma. Victims of these diseases never get peace of mind in any stage, when at sleep or awake. When the diseases are severe the body is bedewed with sweat, the face becoming pale, expression impossible, the respiratory efforts become violent and the patient is in a paroxysm of the most intense dysphonia. When the patient is in such a stage he feels the world whirl round him, let him take one dose of our **Maha Sasarista** and he is sure to feel immense relief. Our **Maha Sasarista** is the specific for the constitutional cure of Cough and Asthma. We generally advise our patients to use this medicine first of all. 3 bottles are quite sufficient to destroy the disease to its very germ and to give great relief and peace of mind.

Price: 8 oz. phial ***Rs. 1-8.*** 3 phials ***Rs. 3-12.*** *Postage*: ***As. 11 & Rs. 1-9.***

SRI GOPAL TAILA

(For external application.)

The Wonderful Invigorator of the Nervous system

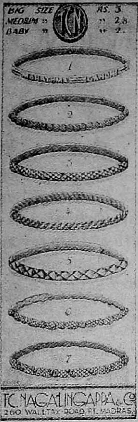
Sri Gopal Taila is the best Nervine Tonic. It invigorates the brain, cheers the mind, removes all seminal weakness and acts as a sovereign remedy for sexual incapacity. It has the most exhilarating effect after use. It infuses a fresh vigour into the worn-out and infirm constitution.

Price: per phial ***Re. 1.*** 3 phials ***Rs. 2-8.*** *Postage*: ***0-8-0 & 0-13-0.***

The Mahat Ayurvedic Pharmacy,

Kaviraj Rajendranath Sen Gupta Kabiratna,

144/1 Upper Chitpur Road, CALCUTTA



T. C. N. LEADS

WHY?

There is Nothing Better,
Neater or Nicer to Wear
T. C. N. is an efficient
substitute for

SOVEREIGN
GOLD BANGLES

Guaranteed for two years.

Big Size from 2″ and above Rs. 3 per pair
Medium Size from $1\frac{3}{4}$″ below 2″
Rs. 2—8—0 per pair
Baby Size from $1\frac{1}{2}$″ below $1\frac{3}{4}$″ Rs. 2 per pair
V. P. Charges 0—6—0 up to 6 pairs.
Available in all Modern Styles.
Catalogue Free on Application.

T. C. Nagalingappa & Co.,

280, WALLTAX ROAD, P. T., MADRAS

ELEMENTARY GENERAL SCIENCE

(MALAYALAM)

To suit the new syllabus

BY

P. Appukutta Menon, B. A., L. T.,

Science Assistant,

Rajah's High School, Kollengode.

Lower Secondary Arithmetic

FOR

MIDDLE SCHOOL CLASSES

BY

T. Lakshmikutty Varrisyar, B. A., L. T.,

Mathematics Assistant,

Victoria Girls' High School, Trichur.

WELL PLANNED BOOK WITH

NUMEROUS EXERCISES

APPLY TO

THE DECCAN PUBLISHING HOUSE,

Huzur Road, CALICUT

OR

V. SUNDARA IYER & SONS,

TRICHUR

THE SCHOLAR

THE PREMIER MONTHLY JOURNAL OF MALABAR

Editor:—E. H. PARAMESWARAN, M. A., L. T.

Subscription Rs. 3 a Year and annas 4 a copy.

ADVERTISEMENT TARIFF.

	For a year.	*For single insertion.*
Full Page	Rs. 80	Rs. 8
Half Page	Rs. 45	Rs. 4½
Quarter Page	Rs. 25	Rs. 2½

Special rates for Special positions.

BUSINESS NOTICE.

1. The Scholar will be published by the end of every month.

2. Contributions for publication in the magazine are invited on topics of general interest. Rejected contributions will not be returned unless stamps are enclosed to cover the postage.

3. All communications relating to the magazine should be addressed direct to the office and not to any individual by name.

4. Subscribers are requested to quote their subscribers' number when writing to the office: otherwise, unnecessary delay may be occasioned owing to the difficulty of searching out the correct address.

5. Advertisers who are desirous of changing their running advertisements are requested to send in their change of matter before the 1st of every month.

6. The Scholar reserves to itself the right to accept or refuse any advertisement which it does not approve, and in no case will accept any advertisement which contains any objectionable matter; it also reserves to itself the right to alter or delete words or phrases which it considers objectionable.

7. Sample copies will be sent on application when accompanied by stamps for **two annas.**

For all other information please apply to:—

THE MANAGER.

The Scholar, Palghat.

V. R. L.

RANGA IYER & BROS.,

SILK & CLOTH MERCHANTS,

BIG BAZAAR, PALGHAT

POPULAR, RELIABLE & CHEAPEST HOUSE FOR

Benares, Bangalore, Conjeevaram,

Madras, Karachi & Salem Silks, Sarees,

Dhoties and Angavastrams in

up-to-date designs and

latest style.

MOFUSSIL ORDERS PROMPTLY EXECUTED

SMALL PROFITS & QUICK RETURNS

A TRIAL WILL CONVINCE YOU

A Text Book of Elementary Mathematics

BY

V. P. VISWANATHA IYER, B. A., L. T.,
St. Mary's High School, Dindigul.

Books I, II, III, for Forms IV, V, VI respectively.

Difficulties in the various chapters have been classified into **three distinct stages** according to the standards of the forms and treated **concentrically.** Exercises have been given in **order of gradually increasing difficulty** under worked out models. There is ample scope for **individual work. Oral exercises** have been given wherever possible.

A Text-Book of Algebra for Forms IV, V, VI.

A Text-Book of Algebra Part I for forms V and IV.

BY

V. P. VISWANATHA IYER, B. A., L. T.

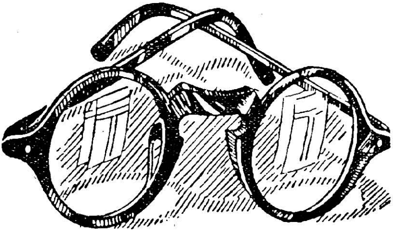
DEPENDABILITY

HIGH CLASS FRAMES OF

TESTED MERIT!!

CONCESSION RATES FOR STUDENTS!!

REMEMBER 26 YEARS' EXPERIENCE



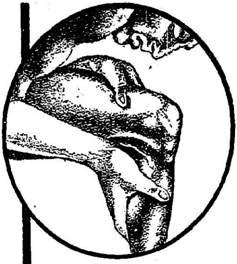
WE STAND FOR QUALITY

Patronised by Maharajas, High Court Judges, Doctors etc.

RADHA BROS.,

OPTHALMIC OPTICANS.

174, Broadway, MADRAS



Sprains

Don't suffer pain needlessly. Just rub AMRUTANJAN to the affected part and watch its penetrating warmth go deep down into the muscle and soothe the pain away. Nothing is quite so good as AMRUTANJAN to bring quick relief.

AMRUTANJAN

CURES ALL ACHES & PAINS

PROPERTY FOR SALE.

IN PALGHAT CITY

Stella Cottage, a commodious bungalow, and valuable Building sites. Near the glacis. Either as a whole or in convenient plots.

For further particulars apply to:—

Mr. T. K. Sesha Ayyar,

Advocate, PALGHAT

THE SCHOLAR PRESS,

PALGHAT

We undertake and execute all kinds of art printing, including reproduction of pictures in colour.

High class magazine work and book work, under expert management and supervision, are our special line, and we undertake to execute all contracts with taste and precision—and in time. We suggest that you try us once.

E. V. Ramakrishnan, B. A.,
Manager.

Printed at The Scholar Press, Palghat and published by
E. H. Parameswaran at Palghat.